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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/638,425

08/12/2003

Jesse Zhu

14417

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293

7590

07/06/2006

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EXAMINER

GORMAN, DARREN W

ART UNIT

PAPER NUMBER

3752

DATE MAILED: 07/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary	Application No.	Applicant(s)	
	10/638,425	ZHU ET AL.	
	Examiner	Art Unit	
	Darren W. Gorman	3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) 13-47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 12, 2006 has been entered.

Election/Restrictions

2. Claims 13-47 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on January 19, 2005.

Specification

3. The amendment filed June 12, 2006 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: The term "surface" added to the specification in order to create proper antecedent basis for the recited claim term "ground surface electrode" is deemed new matter. It is also noted that Applicant's specification amendment filed June 12, 2006 does not correctly correspond to the text on the page and line of the specification indicated. The aforementioned amendment indicates amending the paragraph "beginning at line 19 of page

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1 of the application as follows”, however no such paragraph is found in the specification at the indicated location.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claim term, “ground surface electrode”, as recited in claims 1, 5, 7-9, 11 and 12, is not supported in the originally filed disclosure.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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7. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Talacko, USPN 4,747,546.

Talacko shows a powder spray gun, wherein at least one embodiment (see Figures 2 and 3) comprises: a housing (4) having first and second opposing ends, the housing defining a chamber (10 – which includes portions 18, 20, 24 and 26) terminating in an outlet passageway (32) at the first end of the housing; an inlet (28) opening into the chamber for pneumatically conducting a powder-gas mixture into the chamber (see column 3, lines 54-55); a high voltage pin electrode (82 or 91) positioned in the chamber and spaced upstream of the outlet passageway, the high voltage pin electrode having a first surface area; and a ground surface electrode (6) positioned in the chamber and spaced upstream from the high voltage pin electrode, the ground surface electrode having a second conducting surface area that is clearly shown to be larger than the first surface area of the high voltage pin electrode to give a pin-to-surface electrode configuration (see again Figures 2 and 3). With respect to the recitation that the second conducting surface area is “sufficiently larger...such that when a high voltage is applied to the high voltage pin electrode, an electrical field produced in a vicinity of the ground surface electrode is sufficiently low to prevent arc discharging occurring in the vicinity of the ground surface electrode in the chamber”, it can reasonably be assumed that arc discharging would also be prevented in the same “vicinity of the ground electrode” region of the apparatus shown in at least Figures 2 and 3 of Talacko, even though not expressly discussed in the disclosure of Talacko, since the structure as recited in claim 1 is anticipated.

As to claim 2, Talacko shows a means for supplying a gas (22) toward the high voltage pin electrode (see Figures 2 and 3). As to the functional recitations “cleaning gas” and “to

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reduce powder deposits on the high voltage pin electrode”, the gas entering the powder gun through inlet (22) and flowing through the chamber (10) would inherently function to assist in preventing adherence of powder on the high voltage pin electrode.

As to claim 3, Talacko shows the inlet (28) for conducting the powder-gas mixture into the chamber as being located at the second end of the housing (see Figures 2 and 3).

As to claim 4, Talacko shows the apparatus wherein the high voltage pin electrode includes at least one charging pin (82 or 91) connected to a conductor (74) located in an electrically insulated tube (72) disposed along an axis of the housing (see column 4, lines 12-15), the conductor being connectable to a power supply (78) for applying high voltages to the at least one charging pin (see Figures 2 and 3).

Response to Arguments

8. Applicant's arguments filed on pages 14-16 of the “Remarks” section of the response filed June 12, 2006, with respect to the use of the term “ground surface electrode” and the meaning thereof as not being new matter, have been fully considered but they are not persuasive. In the first paragraph found on page 15 of the aforementioned “Remarks” section, Applicant asserts that the use of “surface” to further define the ground electrodes of the present invention is clearly taught in the application as originally filed. However, none of the comments made by Applicant after the above assertion, persuasively demonstrate that the claim term “ground surface electrode” is clearly taught in the originally filed disclosure, as required under the first paragraph of 35 U.S.C. 112. The comments merely show that the specification supports the ground electrode as having a “large surface area”, however this does not adequately support the

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newly added claim term “ground surface electrode”, which was not present in the originally filed disclosure. Further, the arguments set forth in the second and third paragraphs found on page 15 of the aforementioned “Remarks” section are not commensurate with the scope of the claims, nor do they demonstrate that the claim term “ground surface electrode” is clearly taught in the originally filed disclosure. It is also noted (see the first paragraph on page 16 of the aforementioned “Remarks” section) that Applicant is expressly adding the term “surface” to the specification by way of the June 12, 2006 amendment, in order to “provide antecedent basis for the use of the term in the claims”.

9. Applicant's arguments filed on pages 16-18 of the “Remarks” section of the response filed June 12, 2006, with respect to the rejection of claims 1-4 under 35 U.S.C. 102(b) as being anticipated by Nagasaka et al. (US Patent No. 4,805,069), have been considered but are moot in view of the new ground(s) of rejection set forth above under paragraph 7 of this office action.

Conclusion

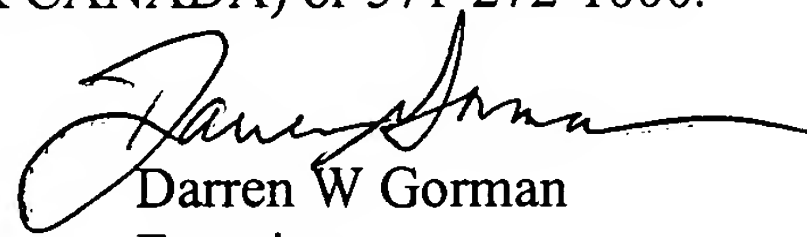
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patents to Sickles and Buschor are cited as of interest.

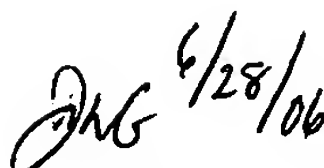
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darren W. Gorman whose telephone number is 571-272-4901. The examiner can normally be reached on M-F 7:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on 571-272-4919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Darren W Gorman
Examiner
Art Unit 3752


DWG
June 28, 2006